



REPORT OF THE  
SECRETARY OF AGRICULTURE  
TO THE  
COMMITTEE ON AGRICULTURE  
HOUSE OF REPRESENTATIVES  
COMMITTEE ON AGRICULTURE  
AND FORESTRY  
U.S. SENATE

# Meat and Poultry Inspection 1974



U.S. DEPARTMENT  
OF AGRICULTURE

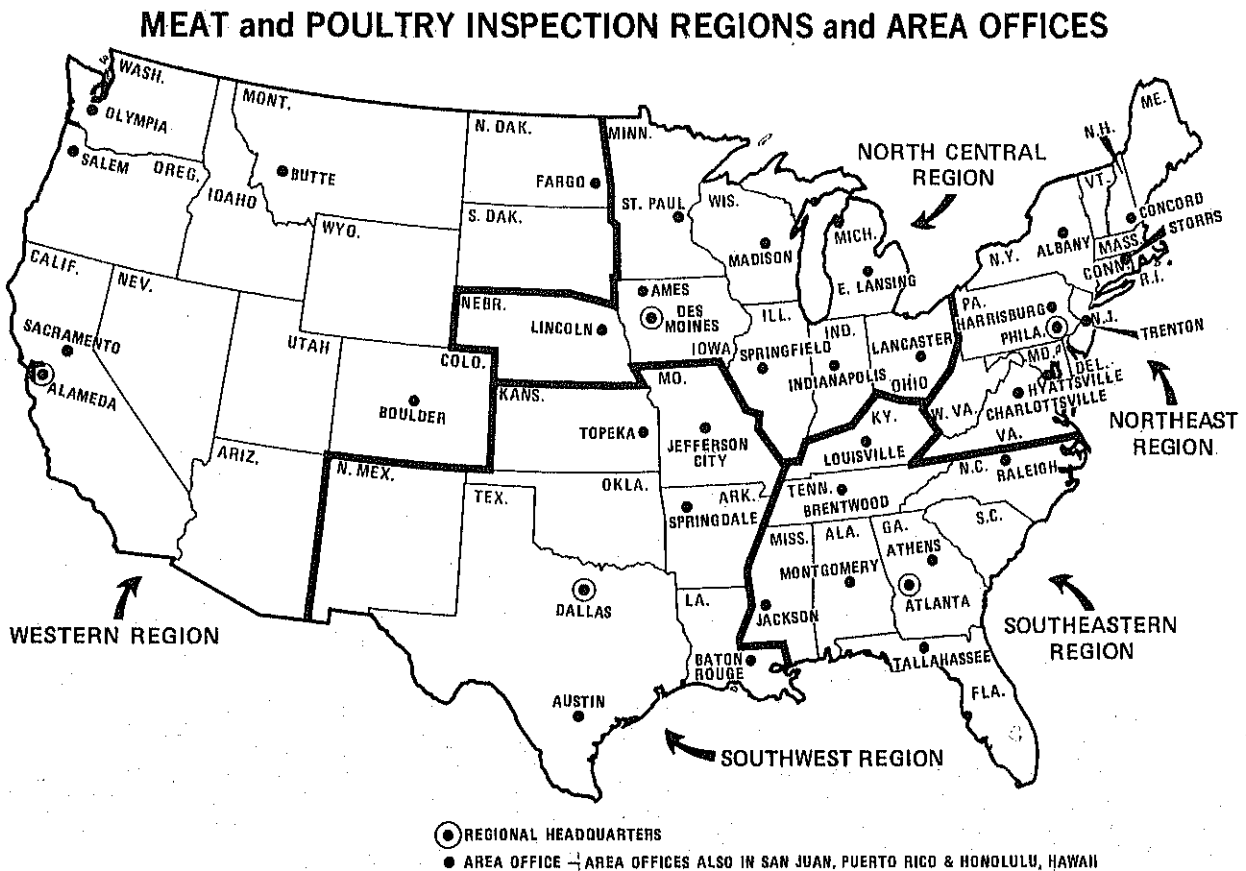
**Issued May 1975**



## FOREWORD

This report to the Committee on Agriculture of the U.S. House of Representatives and the Committee on Agriculture and Forestry of the U.S. Senate is submitted as required by section 301(c)(4) of the Federal Meat Inspection Act (21 U.S.C. 661), section 17 of the Wholesome Meat Act (21 U.S.C. 691), and sections 27 and 5(c)(4) of the Poultry Products Inspection Act, as amended (21 U.S.C. 470 and 21 U.S.C. 454.)

Section 20 of the Federal Meat Inspection Act also calls for an annual report to Congress on the Foreign Meat Inspection Program. This report was submitted to Congress earlier this year. Imports are referred to briefly in this report.



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# MEAT AND POULTRY INSPECTION 1974

Report of the Secretary of Agriculture  
to the Committee on Agriculture, House of Representatives  
Committee on Agriculture and Forestry, U.S. Senate

## SCOPE OF RESPONSIBILITIES

The Federal Meat Inspection Act and the Poultry Products Inspection Act, as amended, require the Secretary of Agriculture to inspect the slaughter of certain domestic livestock and poultry and the processing of meat and poultry products. The Secretary has jurisdiction from the time livestock and poultry are received at the slaughtering establishments until the finished products are distributed in commerce to consumers, or distributed otherwise subject to the Acts. The objective of these laws is to prevent the sale and distribution of adulterated or misbranded meat and poultry products.

Establishments preparing meat and poultry products for sale or distribution in interstate or foreign commerce are required to have Federal inspection unless exempted under the Acts. Those doing intrastate business in certain "non-designated States" operate under State inspection programs that are required to apply requirements at least equal to those under the Federal Acts. Federal inspection is required to be extended to intrastate operations in those "designated" States that do not maintain an inspection program with requirements at least equal to those under the Federal Acts.

The size of this undertaking is extensive. During 1974, Federal inspection was provided by the Animal and Plant Health Inspection Service (APHIS) of this Department at 5,848 plants, and supervision was exercised over 6,708 plants under State inspection. To provide the inspection and supervision required by the meat and poultry inspection laws, 9,077 Federal inspectors and 4,790 State inspectors were utilized.

USDA is responsible for applying uniform standards with respect to sanitation, inspection procedures, and product labeling at all plants under Federal inspection. It is also responsible for assessing the effectiveness of State inspection programs to assure that standards at least equal to those under the Federal Meat Inspection Act and the Poultry Products Inspection Act are being applied by the States to meat and poultry establishments under their jurisdiction. In addition, support is extended by USDA to State programs in the form of funds, training, and technical assistance.

Finally, through its Compliance Staff, USDA conducts reviews and investigations for possible violations of the meat and poultry inspection laws.

All legal work in the Department of Agriculture with respect to the administration and enforcement of these laws is performed by the Office of the General Counsel.

The above activities are discussed in more detail in this report.

Table 1.--Federal inspection--December 31, 1974  
(includes Talmadge-Aiken)

	Meat plants	Poultry plants	Meat/ poultry plants	Total
Slaughtering operations only....	365	233	1	599
Processing operations only.....	2572	306	1140	4018
Slaughtering and processing.....	956	143	132	1231
Total.....	3893	682	1273	5848

Table 2--Federal plants inspected by State employees  
under the Talmadge-Aiken Act, 1974

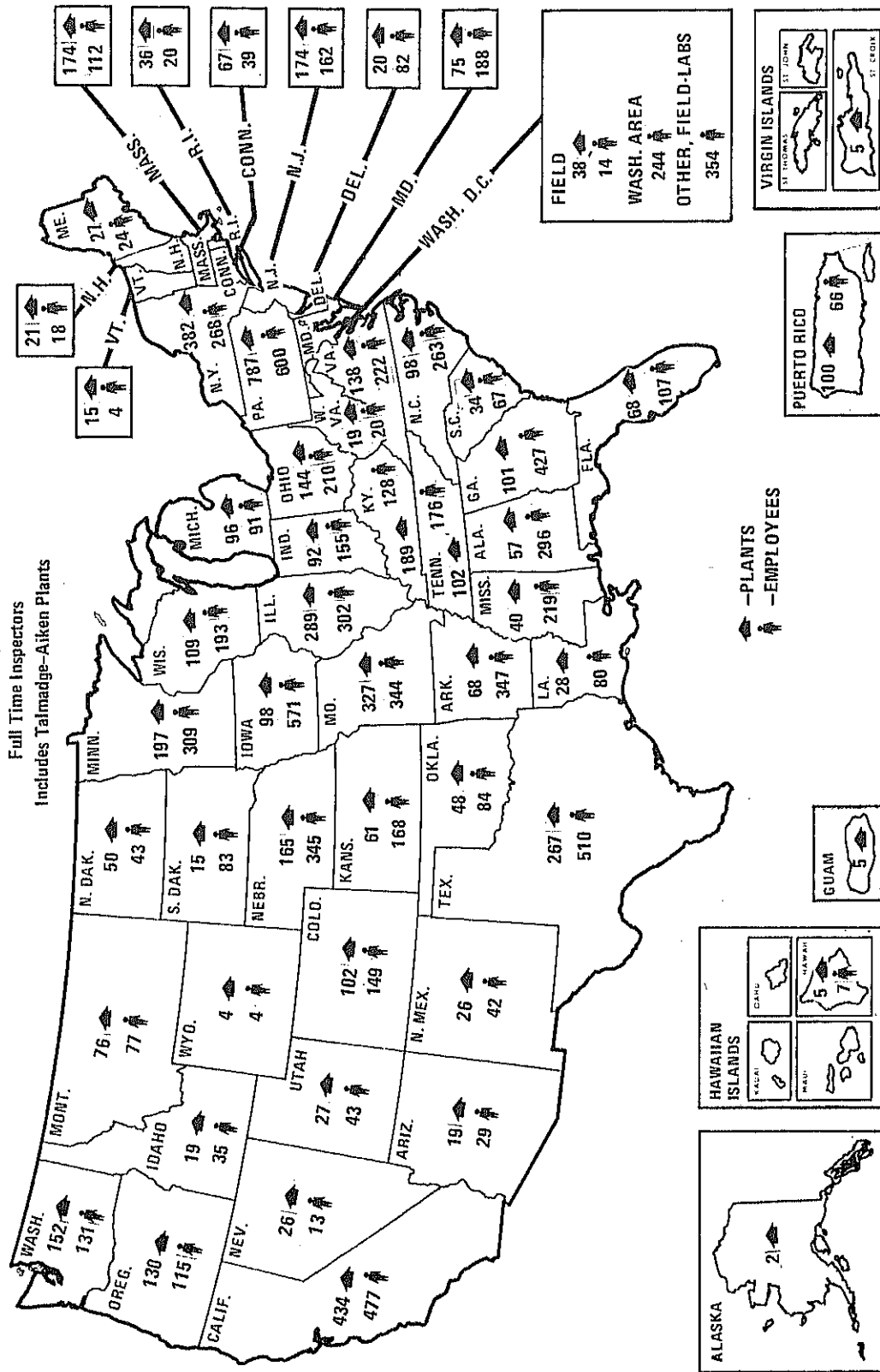
State	Meat plants	poultry plants	Combination meat and poultry plants	Total plants
Alaska.....	1		1	2
Arkansas.....	4			4
California.....	83	3	36	122
Connecticut.....			1	1
Delaware.....	6			6
Georgia.....	5		1	6
Hawaii.....			1	1
Illinois.....	15	2	3	20
Indiana.....	3		1	4
Kansas.....	1	1	1	3
Maryland.....	12	4	2	18
Michigan.....	22			22
North Carolina.....	11			11
Oklahoma.....	9	1	3	13
Rhode Island.....	1		1	2
South Carolina.....	9	2	3	14
Utah.....	2			2
Virginia.....	27	4	5	36
TOTAL.....	211	17	59	287

# FEDERALLY INSPECTED PLANTS and INSPECTORS by LOCATION

December 31, 1974

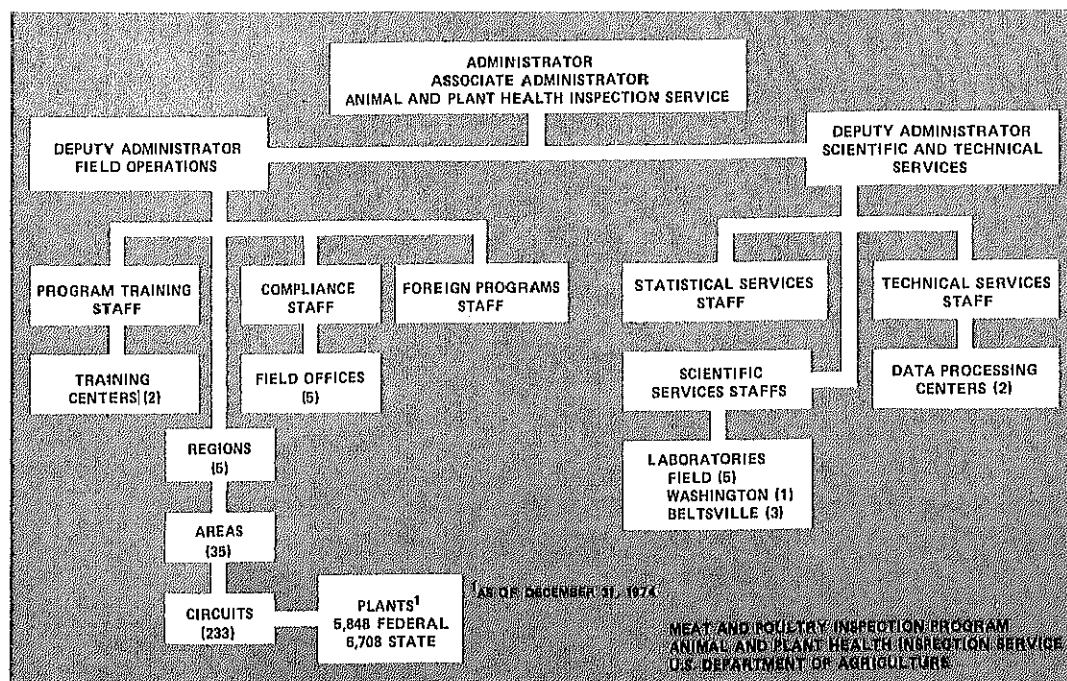
Full Time Inspectors

Includes Talmadge-Aiken Plants





## ORGANIZATION



Responsibility for administration of the meat and poultry inspection laws is assigned to the Animal and Plant Health Inspection Service. The Meat and Poultry Inspection Program of APHIS is divided into two organizational units: Field Operations and Scientific and Technical Services.

Field Operations includes the meat and poultry inspectors who enforce regulations in establishments and compliance officers who maintain surveillance over activities of persons or firms subject to laws administered by the Program. It includes a Foreign Programs Staff that assesses the effectiveness of inspection programs in countries exporting product to the United States and directs the inspection at our ports of imported meat and poultry products prior to their release by the Customs Service. Field Operations also has responsibility for the training of all inspection personnel.

Scientific and Technical Services comprises a wide range of staff and support functions. These functions include the development and application of standards for labels, packaging materials, plant facilities and equipment, product composition, environmental sanitation, and inspection procedures. Laboratory support is provided in a variety of disciplines including chemistry, pathology, epidemiology, and microbiology. The Scientific and Technical Services Staffs are Washington-based with the exception of regionally located laboratories and data processing centers.

The organizational structure of the Meat and Poultry Inspection Program was not substantially altered during 1974. Minor changes were made to strengthen certain functions. These included the opening of a new area office in Olympia, Washington, and the addition of two circuit supervisors for improved coverage of field operations.

## **INSPECTION**

Inspection is carried out at slaughtering and processing establishments. Inspection falls into four general work categories: ante-mortem, post-mortem, sanitation, and product processing.

### **Ante-mortem and Post-mortem Inspection**

Poultry and animals are examined for signs of disease or abnormality before slaughter. Following slaughter, each individual carcass and its viscera are scrutinized carefully. This inspection establishes the wholesomeness of carcasses and organs passed for human consumption. Those that do not pass inspection are destroyed for human food purposes. The magnitude of the overall task can be measured by the number of animals and birds inspected in 1974--over 121 million livestock and 3 billion birds.

Since the disposition of carcasses and parts of carcasses has major public health and economic importance, it is essential that inspectors operate uniformly from establishment to establishment. For these reasons, veterinary supervisors monitor the procedures and the work of the inspectors assigned to each establishment. Staff specialists conduct meetings in each region to insure that veterinary inspectors supervising the work use the same standards in making dispositions of animals, carcasses, and parts.

### **Sanitation**

Clean plants and equipment are essential to the production of wholesome food. If inspectors assigned to slaughtering and processing establishments find insanitary conditions, immediate correction is required. If the insanitary conditions are such that product may be adulterated, inspection is withheld and all operations cease. If after appropriate notice a plant fails to take action to eliminate such insanitary conditions, inspection service may be withdrawn.

The nature of meat and poultry operations requires constant effort toward more objective means of assuring that conditions potentially hazardous to health are eliminated. The microbiological approach to this problem is being emphasized by the Program. Participation by establishments is encouraged, and assistance in developing programs is provided by the Program. There are now more than 150 establishments with approved microbiological monitoring programs or with programs in the developing stage.

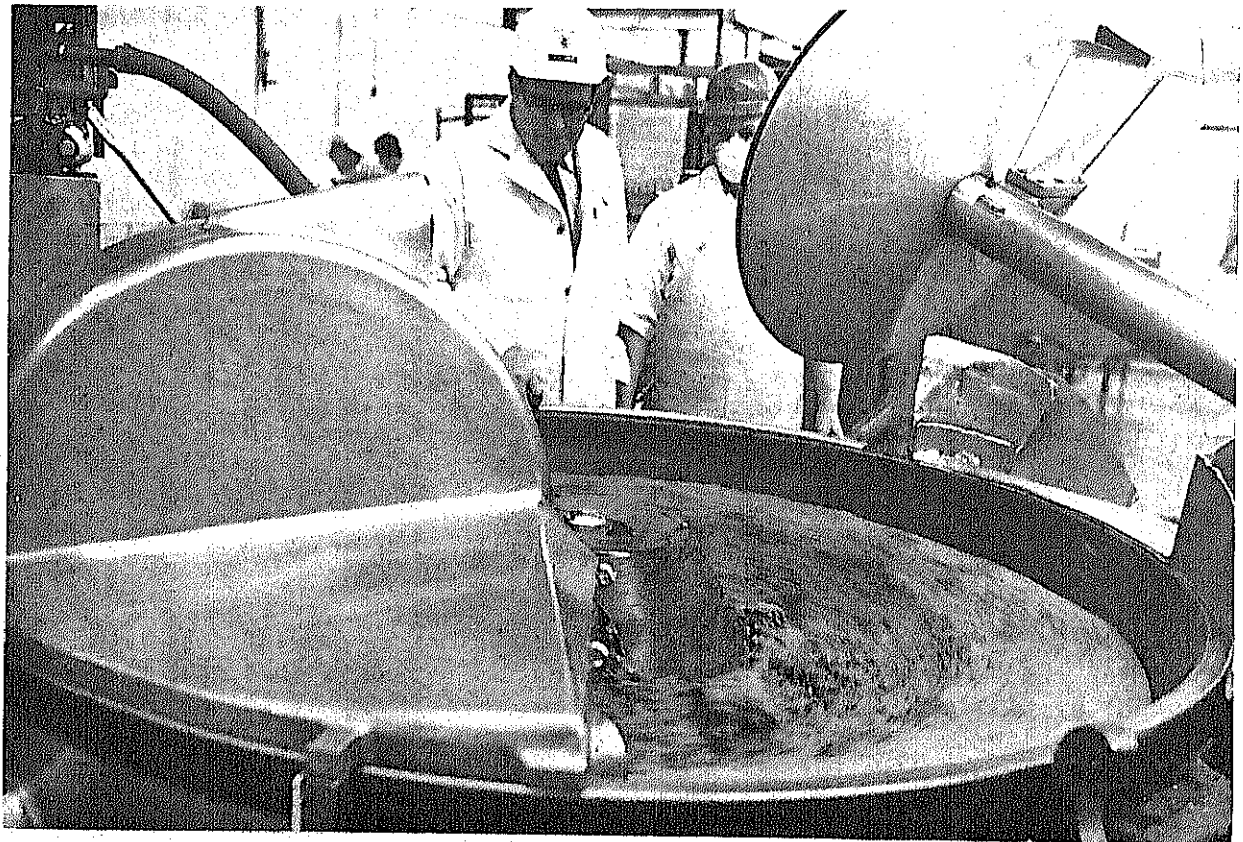
### **Product Processing**

Processed and fabricated meat and poultry products are continuing to increase in variety and complexity, demanding specialized inspection skills. Emphasis on sound plant quality control procedures has shown good results. When good, statistically sound, quality control procedures are followed by the plant, the inspector's effectiveness is greatly increased. The system provides more information for the inspector to inspect product and assure its compliance with the regulations. Also, it reduces noncompliance by permitting time for on-line corrections or adjustments of product before it is packaged.



ST 3198-13

Member of taste panel samples  
quality of a salami product.



USDA inspector checks product formulation for cooked sausage. 0371 x 1-72-26

Table 3--Number of livestock federally inspected, 1970-1974

Species	1970	1971	1972	1973	1974
(In thousands)					
Cattle	30,818	31,449	32,279	30,495	33,318
Calves	3,024	2,806	2,420	1,810	2,355
Hogs	78,187	86,667	78,736	72,262	77,071
Goats	421	301	146	110	72
Sheep and lambs	10,010	10,256	9,904	9,234	8,556
Equines	55	61	67	161	207
TOTAL	122,515	131,540	123,552	114,072	121,579

Table 4--Number of poultry federally inspected, 1970-1974

Class	1970	1971	1972	1973	1974
(In thousands)					
Young chickens	2,270,193	2,779,081	2,940,310	2,915,336	2,904,727
Mature chickens	176,207	183,200	185,823	189,839	193,328
Fryer-roaster turkeys	11,503	12,320	12,737	12,973	13,901
Young turkeys	93,014	98,224	107,551	108,763	111,540
Old turkeys	1,062	1,201	1,065	1,278	1,308
Ducks	11,835	11,028	11,230	11,006	11,522
Geese	374	448	392	329	363
Rabbits*	631	817	940	651	718
Other*	29	12	1	6	11
TOTAL	3,064,848	3,086,331	3,260,049	3,240,181	3,237,418

\* These animals were inspected under the voluntary inspection program pursuant to the Agricultural Marketing Act of 1946, as amended (7 U.S.C. 1621 et seq.).

To date, there have been over 900 voluntary quality control programs submitted by inspected establishments and approved by the Program. This is an increase of 200 over 1973. Increased emphasis has been placed on quality control by training inspectors and by special meetings with field personnel to explain the concepts involved.

Building on this base, canned ham inspection procedures were revised to encourage more uniform inspection. As a result, the number of violations of the regulations has been significantly reduced.

Table 5--Federal establishments by States--December 31, 1974

State or territory	Meat plants	Poultry plants	Meat/ poultry plants	Total plants
Alabama	20	24	13	57
Alaska	0	0	0	0
Arizona	14	1	4	19
Arkansas	11	40	13	64
California	207	26	79	312
Colorado	70	16	16	102
Connecticut	51	5	10	66
Delaware	4	7	3	14
Dist. of Columbia	30	5	3	38
Florida	42	4	22	68
Georgia	34	35	26	95
Guam	2	0	3	5
Hawaii	3	0	1	4
Idaho	17	1	1	19
Illinois	188	19	62	269
Indiana	52	16	20	88
Iowa	71	8	19	98
Kansas	41	3	14	58
Kentucky	140	11	38	189
Louisiana	19	3	6	28
Maine	13	9	5	27
Maryland	26	15	16	57
Massachusetts	123	14	37	174
Michigan	52	13	9	74
Minnesota	82	24	91	197
Mississippi	12	19	9	40
Missouri	238	33	56	327
Montana	35	1	40	76
Nebraska	107	10	48	165
Nevada	5	1	20	26
New Hampshire	12	3	6	21
New Jersey	107	19	48	174
New Mexico	19	1	6	26
New York	279	21	82	382
North Carolina	47	24	16	87

Table 5--Federal establishments by States--(Continued)

State or territory	Meat plants	Poultry plants	Meat/ poultry plants	Total plants
North Dakota	36	0	14	50
Ohio	97	16	31	144
Oklahoma	25	5	5	35
Oregon	105	8	17	130
Pennsylvania	616	77	94	787
Puerto Rico	77	2	21	100
Rhode Island	23	6	5	34
South Carolina	8	7	5	20
South Dakota	11	4	0	15
Tennessee	59	11	32	102
Texas	171	33	63	267
Utah	12	7	6	25
Vermont	11	4	0	15
Virginia	58	24	20	102
Virgin Islands	2	0	3	5
Washington	121	9	22	152
West Virginia	11	3	5	19
Wisconsin	64	18	27	109
Wyoming	2	0	2	4
Total	3,682	665	1,214	5,561
Talmadge-Aiken plants	211	17	59	287
TOTAL	3,893	682	1,273	5,848

Table 6--Processed meat and poultry products inspected, 1970-1974<sup>1/</sup>

Product	1970	1971	1972	1973	1974
(Million pounds)					
Meat products	52,276	53,706	52,954	50,552	54,259
Poultry products	15,343	17,269	19,516	22,035	18,723
TOTAL	67,619	70,975	72,470	72,557	72,982

<sup>1/</sup> These data represent the total weight of finished products including the weight of nonmeat ingredients. In addition, there is some double counting of complex products which require inspection at intermediate steps in production.

## SURVEILLANCE AND COMPLIANCE ACTIVITIES

The Compliance Staff is responsible for enforcing registration and recordkeeping requirements and identifying possible violations of the meat and poultry inspection laws. The Compliance Staff is also responsible for initiating detention actions to control adulterated, misbranded, and uninspected product found in distribution channels, and for systematic operations review of all federally inspected establishments.

In 1974, periodic surveillance of persons and firms engaged in the meat and poultry and allied industries (wholesalers, brokers, animal food processors, renderers, warehouses) continued. During the year, 43,163 compliance reviews were made at these business locations. Many of these reviews were scheduled under a planned program to systematically review firms on the basis of their past compliance with the laws. Those in a high risk category, based on past violations, are visited more frequently.

In 1974, the Compliance Staff documented 845 alleged violations of the meat and poultry inspection Acts. Some of these cases involved more than one alleged violator. Minor violations involving firms or individuals with no past history of violations are closed with letters of warning. In 1974, 955 letters were issued. These letters have proved generally effective in insuring future compliance. Serious violations or repeat violations by firms or individuals showing noncompliance are referred for prosecution. During 1974, 14 prosecutions were successfully completed. Examples of completed prosecutions under the Acts include cases involving adulteration of product resulting from rodent contamination while the product was in storage, in two separate cases, and sale of product adulterated with sulfites, in one case. In one of these cases, carcasses were misrepresented as federally

inspected through the application of a facsimile of the marks of USDA inspection. Other offenses prosecuted included selling sheep meat misbranded as veal, detaching official inspection marks, and assaulting a Federal official.

Compliance officers also completed detention actions involving almost 9.7 million pounds of product. The product is normally brought into compliance or, if unwholesome, destroyed for food purposes. If voluntary dispositions are not made, seizure and disposition by Federal courts are necessary. In 1974, two seizures involving 1,719 pounds of product were made. One of these seizures involved over 1,400 pounds of horsemeat which had been offered for sale as beef. The Compliance Staff also participated in monitoring three recalls involving 264,027 pounds of product. One recall involved meat and poultry products containing mushrooms suspected of bacterial contamination. Another involved perishable canned hams voluntarily recalled by the processor due to suspected time and temperature abuse after the product left the official establishment. The third recall involved beef stew with botulism contamination.

The Compliance Staff also conducted 1,393 reviews of the adequacy of inspection in federally inspected establishments. These reviews are also conducted on a systematic basis with followup reviews based on the numbers of deficiencies found in previous visits. Reports of deficiencies are given to local program managers for immediate corrections and to headquarters managers for long-range improvements.

The Compliance Staff continued cooperative Federal-State development and training programs for intrastate compliance activities. Standards for "equal to" compliance programs were developed and well received by participating States. Cooperative intrastate compliance programs are conducted in 36 States.

Table 7--Compliance staff activities, 1970-1974

Type of Action	1970	1971	1972	1973	1974
Compliance reviews conducted	22,014	23,408	28,844	33,880	43,163
Apparent violations detected	693	811	669	789	845
Letters of warning issued	679	708	807	868	955
Cases referred to Department Office of Investigation	57	46	53	52	51
Cases referred to Department Office of General Counsel	96	72	54	95	79
Cases referred to Department of Justice by General Counsel	46	38	26	40	38
Cases prosecuted by Department of Justice	8	12	11	11	14
Detention actions on product	666	672	640	793	769
Establishments reviewed				806	1,393



## IMPORTS AND EXPORTS

Activities of the 1974 Foreign Meat and Poultry Inspection Program were reported to Congress in March 1975.

U.S. establishments continued to be ineligible during all of 1974 to export meat and meat byproducts to the Federal Republic of Germany. This situation has existed since November 1, 1973, as a result of the requirement by West Germany that plants wishing to export to that country must be certified by the Department as meeting all the requirements of the West German law. These requirements are essentially the same as those set forth by the European Economic Community for intra-community trade in meats. They would require a number of major changes in U.S. plant facilities and operations as well as inspection procedures. No U.S. establishment has taken these steps.

During 1974, West Germany and the United Kingdom also imposed the European Economic Community Directive on poultry inspection as a condition for the importation of U.S. poultry. Although somewhat less demanding than the meat requirements, it is nevertheless restrictive and requires Department certification of individual establishments. Some of the changes imposed by the EEC Directive are elimination of wooden cages for transporting chickens, cage by cage examination of live birds, and annual health examinations for plant employees who handle poultry meat. So far, a total of 19 poultry establishments have made these changes and have been certified for poultry exports to West Germany and the United Kingdom.

## STAFF ACTIVITIES

Inspectors in the establishments are supported by a Washington, D.C., unit known as Scientific and Technical Services. This unit has three basic divisions: Scientific Services, Technical Services, and Statistical Services.

### Scientific Services

#### Chemistry

The New York City laboratory with personnel and equipment was closed out and transferred to the new Eastern Laboratory located on the premises of the Richard B. Russell Research Center, Athens, Georgia.

The Eastern Laboratory is the second of three planned interdisciplinary laboratories, with the three disciplines of chemistry, microbiology, and pathology under one roof. This interdisciplinary laboratory provides better analytical service for field personnel by performing complete tests on samples involving any combination of the three disciplines.

A "Recognized Laboratory" program was started in 1974, making it possible for commercial laboratories to be identified by the Chemistry Staff as competent to test biological and chemical residue samples. When a producer has

residue control problems, a list of recognized commercial laboratories is made available to him. The recognized laboratory will perform the required analyses for the producer with the work being monitored by a Federal laboratory.

### Microbiology

The microbiology laboratories analyzed meat and poultry products to evaluate sanitary practices and product freshness, and to determine the possible presence of food poisoning bacteria and toxins, extraneous materials, and antibiotic residues. Tests for undeclared species of meat (such as horsemeat) are made, and abnormal tissues are analyzed to identify disease producing organisms. These laboratories also support field inspectors with teams of sanitation experts who survey plant processing conditions and determine associated microbial levels. In 1974, APHIS microbiology laboratories analyzed 20,363 samples and conducted a total of 68,197 tests on these samples.

### Residue Evaluation

The total number of residue cases requiring regulatory action in 1974 reached 859 cases, compared with 669 in 1973. There was a substantial increase in the 1974 monetary value of livestock and poultry destroyed due to insecticide residues. Contamination of Mississippi broilers with dieldrin caused a loss of approximately \$8 million. The dollar loss of Michigan livestock and poultry, due to residues of polybrominated biphenyls, were in the neighborhood of \$15 to \$20 million.

The polybrominated biphenyl losses were due to direct contamination by the chemical, which was stored with feed in a major feed mill. Corrective action required the cooperation of State officials, farmers, and Federal agencies.

Poultry losses due to dieldrin residues were traced mainly to contaminated feed-grade fat. The poultry industry is now taking action to prevent recurrences by setting up laboratories to check feed as well as poultry for pesticide residues.

The Program Staff cooperated with cattle producers and State officials in restricting the movement of livestock, primarily cattle, as an aftermath of spraying fir trees with DDT to control tussock moths in the Northwest. Parts of Washington, Oregon and Idaho were involved, and livestock that grazed in the sprayed areas were pretested before slaughter. Those showing DDT residues in excess of the tolerance were withheld from slaughter.

### Pathology, Toxicology and Epidemiology

A system for testing swine in slaughtering establishments for evidence of infection with trichinosis is presently under development. Substantial progress has been made in characterizing the sensitivity and specificity of the test, and in the development of a prototype model of an automated testing machine. The testing system provides the potential for testing every hog slaughtered in this country (approximately 80 million) for trichinosis and certain other infectious diseases. The adoption of such a system would

improve the quality of inspection service to both producers and consumers, and lower present inspection costs of assuring destruction of trichinae in processed pork products.

Epidemiologists investigated two highly significant incidents of human illness caused by organisms transmitted from animals and animal products. One incident of illness was attributed to ornithosis in turkeys raised in Texas. The source of this human health problem was identified in cooperation with other State and Federal agencies. Hazardous flocks were identified and withheld from market to protect inspectors and processing plant employees. Epidemiologists from the Program and from the Texas Animal Health Commission surveyed all producing farms, identified diseased flocks, and established quarantine and treatment procedures.

A second incident involved botulism in canned beef stew. Two persons were affected, and one died. This is the first case of botulism attributable to a meat product produced under the Federal inspection program. All beef stew produced by this manufacturer since January 1974 was recalled for reinspection.

### Technical Services

During 1974, the Program expanded its efforts to provide more consumer information through better product labeling. Regulations were adopted to provide for uniform presentation of information on labels concerning open dating of meat and poultry products. These regulations require the presentation of specific information, to clarify the meaning of open dates and thus reduce confusion and misunderstanding. In addition, proposed regulations were published relating to nutritional labeling, labeling in Spanish for products distributed solely in Puerto Rico, and labeling using geographic terms, such as Vienna Sausage.

Rules of practice were published (9 CFR 335) to provide procedures for administrative hearings with respect to the refusal, withdrawal, or suspension of inspection service.

Concepts, ideas, and policies were developed within the staffs to deal with new protein sources such as yeast and whey for use in meat and poultry products. The Staff worked with other Government agencies and the industry to establish guidelines for use of such proteins. Reclamation of edible meat by mechanical deboning processes required close attention by the Staff. These new sources of protein and meat are now being evaluated for approved use in a wide variety of meat and poultry products.

Staff members developed a procedure to predict with accuracy the actual biological value of food proteins, particularly in meat products. The procedure, published in the scientific literature, could reduce by 90 percent the time required by researchers and laboratory personnel to make determinations of this type.

## Statistical Services

It is important for inspection procedures to be conducted as economically as possible, yet provide for objective evaluation of inspection results. This is being accomplished by the development of sampling plans which assure conformance to standards. These plans were used during the year in evaluating differences in results among meat and poultry chemistry laboratories and in the monitoring of potentially dangerous chemical residues in the tissues of animals intended for human consumption. They were also used in developing taste panel methodology, microbiological guidelines for meat products, and standards of cleanliness for ready-to-cook poultry.

Table 8--Meat and Poultry samples chemically analyzed, 1974

Total samples, Federal laboratories	90,252
Total samples, State laboratories	19,008
Total samples, certified laboratories	28,880
Overall total samples	138,140

Table 9--Residue testing, 1974

Adulterant	Red meat samples analyzed	Poultry samples analyzed
Chlorinated hydrocarbon pesticides	2,267	1,940
Antibiotics	4,960	677
Organophosphorus compounds	506	254
Arsenic	919	1,303
Trace metals	298	--
Hormones	3,096	--
Sulfa drugs	871	571
Drugs, general	828	--
TOTAL	8,785	4,227

Table 10--Plant facilities and equipment reviewed for compliance with sanitary standards, 1970-1974

Activity	1970	1971	1972	1973	1974
Drawings	3,613	3,342	3,468	4,064	3,491
Equipment Units	905	1,155	1,149	990	538

Table 11--Product labels reviewed, 1970-1974

Activity	1970	1971	1972	1973	1974
Labels processed	109,914	139,880	181,898	178,281	127,415
Labels not approved	6,551	9,460	19,851	13,522	6,428
	6.0	6.8	10.5	7.6	5.1

## TRAINING

A new aid for inspection, "The Individual Performance Plan," has been developed for establishments with a total quality control program. By following this aid, the inspectors can lay out their daily routines in terms of what operations the inspectors will monitor, when and how they will inspect those operations, and what actions they will take should violations occur.

Cooperative efforts have been expanded with schools of veterinary medicine throughout the United States to develop curricula and teaching aids related to food hygiene. By invitation, two laboratory sessions and four lectures were conducted in schools of veterinary medicine in the field of applied food hygiene.

Centralization plans continued to be implemented with the occupancy of a new and larger general training facility in Fort Worth, Texas, and the closing of the Gainesville, Georgia, and Omaha, Nebraska, facilities. The other remaining facility at Springdale, Arkansas, is used for poultry inspection training.

## STATE INSPECTION

Forty States continued to operate meat inspection programs, and 31 States operated poultry inspection programs. At the end of 1974, there were 9,358 meat and poultry establishments under inspection by the States.

The Federal Meat Inspection Act and the Poultry Products Inspection Act provide for the States to develop and operate inspection programs covering intrastate operations on a basis at least equal to Federal inspection. States may receive up to 50 percent Federal funding for the cost of their programs, and Federal technical and training assistance. If a State fails to maintain compliance with the Federal requirements, the Department must designate the State and assume responsibility for inspection of establishments operating in intrastate commerce in that State.



047213628-3

Instructor supervises trainee in inspection of hog carcasses

Table 12--Personnel trained, 1973-1974

Type of training	Veterinarians		Inspectors		Others		Totals	
	1973	1974	1973	1974	1973	1974	1973	1974
At training centers:								
Federal	450	345	2,222	1,714		2		
State	43	44	263	153				
Foreign	1	8			6			
Total							2,985	2,256
At work location:								
Federal	659	1,056	160	201		18		
State	11-	66		9				
Foreign	3				96			
Other (University & City)						119		
Total							929	1,469
GRAND TOTALS							3,914	3,375



Table 13--States Operating Inspection Programs, 1974

State	Meat and poultry plants		Personnel (includes part time)	Program costs FY 74 (includes Fed. funds) (in thousands)
	Inspected	Exempt		
Alabama	101	48	84	\$ 1,066
Alaska	12	5	13	337
Arizona	76	27	49	540
Arkansas	89	53	97	936
California	422	267	338	5,712 <sup>1/</sup>
Colorado	78	48	93	715
Connecticut	82	10	38	736
Delaware	10	15	17	169 <sup>1/</sup>
Florida	274	54	172	2,165
Georgia	182	63	137	2,181
Hawaii	69	0	48	892
Idaho	69	55	87	689
Illinois	664	0	481	4,281 <sup>1/</sup>
Indiana	185	87	139	1,877 <sup>1/</sup>
Iowa	166	277	109	821
Kansas	226	66	215	1,387 <sup>1/</sup>
Louisiana	195	58	179	1,780
Maine	25	42	14	174
Maryland	67	16	62	870 <sup>1/</sup>
Massachusetts	110	36	40	706
Michigan	368	38	209	3,918 <sup>1/</sup>
Mississippi	90	32	93	949
New Hampshire	23	24	13	88
New Jersey	207	8	57	1,036
New Mexico	47	14	27	258
New York	487	139	295	6,261
North Carolina	355	94	271	2,362 <sup>1/</sup>
Ohio	460	186	258	3,422
Oklahoma	129	144	127	1,066 <sup>1/</sup>
Rhode Island	33	2	17	247 <sup>1/</sup>
South Carolina	131	0	114	1,105
South Dakota	77	79	35	332
Tennessee	121	69	84	996
Texas	526	131	407	4,652
Utah	48	52	79	436 <sup>1/</sup>
Vermont	25	28	18	270
Virginia	48	94	79	1,178
West Virginia	51	55	49	824
Wisconsin	333	210	123	2,118
Wyoming	48	19	23	178
Total	6,708	2,645	4,790	\$59,730

<sup>1/</sup>-Talmadge-Aiken costs included.

## OTHER DEVELOPMENTS

### Codex Alimentarius

The Meat and Poultry Inspection Program continues to provide representation on two committees of the Food Standards Program of the Codex Alimentarius Commission sponsored by the United Nations. These are the Meat Hygiene Committee and the Committee on Processed Meat Products. In addition, the Program provides support to the Codex Committee on Food Hygiene in the area of poultry processing.

The Food Hygiene Committee held its eleventh session in Washington, D.C., June 10-14, 1974, under the chairmanship of the Food and Drug Administration, Department of Health, Education, and Welfare. A decision was made during this meeting to advance the Code of Hygienic Practices for Poultry Processing from a Draft Code to a Recommended Standard. The U.S. representatives agreed with this decision after some controversial provisions in the Code were modified.

The Program hosted a meeting of a working group from the Codex Committee on Processed Meat Products in Washington, D.C., on October 15-18, 1974. In attendance were 15 representatives of 6 countries, including the United States. The purpose of the meeting was to study procedures for controlling the compositional standards of cured pork products. General agreement was reached on proposals to be made to the full Committee on Processed Meat Products when it meets in 1975.

The Codex Committee on Meat Hygiene held its third session in London, England, November 25-29, 1974. The Codes for Hygienic Practice and for Ante-Mortem and Post-Mortem Inspection were also advanced from draft codes to recommended codes. However, U.S. delegates were not in agreement with the Committee decision. There are some serious differences between practices in this country and those now proposed in these two codes.

### Nitrosamines

The Secretary's Expert Panel on Nitrites and Nitrosamines held five meetings in 1974. The panel consists of representatives from the Government as well as research institutes and the food industry. It was created in September 1973 to advise on the use of nitrites in food processing, and the possible formation of nitrosamines, which have been identified as a cause of cancer.

Recommendations were recently submitted by the Panel and accepted by the Secretary. They are now being prepared as proposed amendments to the meat and poultry regulations. The amendments would eliminate the use of nitrate except in dry cured products and fermented sausages. They would also reduce the permitted amounts of nitrite in all other cured products except bacon. A joint industry/government study on bacon is planned for early 1975.

Another development in this field was the total banning of spice/cure mixtures that for many years had been routinely used by meat processors. The reason for the ban was the discovery of the interaction of nitrite in the curing portion of the mixture with proteins in the spices to form nitrosamines. This ban was imposed through cooperative efforts of USDA and the Food and Drug Administration.

#### Flexible Containers

The Meat and Poultry Inspection Program is reviewing proposals to package meat and poultry products in flexible, retortable pouches. These flexible "cans" are widely used in other parts of the world, but have not been allowed for packaging commercially sterile, shelf-stable, meat or poultry products in this country because of the concern for safety and package integrity. As a result of work carried out by the U.S. Army Natick Laboratories and some packaging companies, the Program now believes it can safely allow commercial testing to begin. Several companies are interested in this new concept and programs for test marketing are in progress.

